

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated August 21, 2008. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-18 are pending in the Application. By means of the present amendment, the specification and claims 1-18 are amended including for better conformance to U.S. practice, such as deleting reference numerals typically used in European practice that are known to not limit the scope of the claims. Further amendments include correcting typographical errors, amending dependent claims to begin with "The" as opposed to "A", changing spelling from British to American spelling, and correcting certain informalities noted upon review of the claims. By these amendments, the specification and claims 1-18 are not amended to address issues of patentability and Applicants respectfully reserve all rights under the Doctrine of Equivalents. Applicants furthermore reserve the right to reintroduce subject matter deleted herein at a later time during the prosecution of this application or continuing applications.

Applicants thank the Examiner for acknowledging the claim for priority and receipt of certified copies of all the priority document(s).

In the Office Action, specification guidelines are suggested including a use of section headings. Applicants respectfully decline to add the section headings since the section headings are not required and may be inappropriately utilized in interpreting the claimed subject matter.

The specification is objected to due to the British spelling of the word "enrollment". It is respectfully submitted that the amendments noted above to change spelling from British to American spelling obviates these objections. Accordingly, withdrawal of the objections to the specification is respectfully requested.

In the Office Action, claims 2-13 and 15 are objected to because each are in dependent form and accordingly, should begin with "the". Further, claims 17 and 18 are objected to for other informalities. It is respectfully submitted that the amendments noted above to place these claims in proper U.S. form obviates these objections. Accordingly, withdrawal of the objections to claims 2-13, 15 and 17-18 is respectfully requested.

In the Office Action, claims 14 and 16 are rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. It is respectfully submitted that the amendments noted above to place these claims in proper U.S. form obviates these rejections. Accordingly, withdrawal of the rejections under 35 U.S.C. §101 to claims 14 and 16 is respectfully requested.

Claims 14 and 16 are rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite for being directed to a computer program product. It is respectfully submitted that the amendments noted above to place these claims in proper U.S. form obviates these rejections. Accordingly, it is respectfully submitted that claims 14 and 16 are in proper form and it is respectfully requested that this rejection under 35 U.S.C. §112, second paragraph, be withdrawn.

Claims 1-6, 15 and 17-18 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 6,314,196 to Yamaguchi ("Yamaguchi"). Claims 12 and 13 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Yamaguchi in view of U.S. Patent No. 6,035,398 to Bjorn ("Bjorn"). Claims 7 and 9-11 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Yamaguchi in view of U.S. Patent No. 5,799,098 to Kenmore

("Kenmore"). Claim 8 is rejected under 35 U.S.C. §103(a) as allegedly being obvious over Yamaguchi in view of Kenmore in further view of a publication entitled "A personnel identity verification method using DAB fingerprints (Pattern recognition)", 1998) to Vizcaya ("Vizcaya"). These rejections are respectfully traversed. It is respectfully submitted that claims 1-18 are allowable over Yamaguchi alone and in view of any combination of Bjorn, Kenmore, and Vizcaya for at least the following reasons.

Yamaguchi shows a fingerprint registering and checking device (see, Yamaguchi, FIG. 1). The Office Action states that Yamaguchi, in Col. 4, lines 27-33 and 52-61, shows inserting the helper data into the authentication data, however, it is respectfully submitted that reliance on these portions of Yamaguchi or any portions for that matter, is misplaced.

While Yamaguchi does have a methodology for dividing picture blocks to determine a direction of picture elements, it is respectfully submitted that Yamaguchi does not insert the methodology/criteria into the authentication data.

It is respectfully submitted that the method of claim 1 is not anticipated or made obvious by the teachings of Yamaguchi. For example, Yamaguchi does not disclose or suggest, a method that

amongst other patentable elements, comprises (illustrative emphasis added) "creating a property set A from the property set I that includes less information on the actual properties than property set Y, wherein the creating acts are guided by a criteria W; generating a control value V in dependence on properties of the property set A; and inserting the control value V and the criteria W in the authentication data" as recited in claim 1, and as similarly recited in each of claims 14, 15, 16, 17 and 18. Each of Bjorn, Kenmore and Vizcaya are introduced for allegedly showing elements of the dependent claims and as such, do nothing to cure the deficiencies in Yamaguchi.

Based on the foregoing, the Applicants respectfully submit that independent claims 1, 14, 15, 16, 17 and 18 are patentable over Yamaguchi and notice to this effect is earnestly solicited. Claims 2-13 respectively depend from claim 1 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims.

For example, Yamaguchi alone and in view of any combination of Bjorn, Kenmore and Vizcaya does not disclose or suggest (illustrative emphasis added) "creating the property set A includes performing a contracting transformation that transforms given

ranges of input properties to corresponding output values" as recited in claim 2, nor "wherein the contracting transformation transforms a property to a binary number representative of whether the property has a positive or negative value" as recited in claim 3, nor "creating unique criteria W based on respective authentication applications, wherein different respective authentication applications have different unique criteria" as recited in claim 6, nor "wherein the predetermined robustness criterion is based on a signal to noise ratio of the measured properties and the act of creating the property set I includes an act of performing a transformation on the property set Y to create two disjunct property sets I<sub>1</sub> and I<sub>2</sub>, where a signal to noise ratio of properties of the property set I<sub>1</sub> are estimated to be higher than a signal to noise ratio of properties of the property set I<sub>2</sub>; and wherein the property set I<sub>1</sub> is used as the property set I" as recited in claim 7, nor "wherein the transformation is a linear transformation that converts a vector representing the property set Y to a vector with components <sub>i</sub> representing the property set I, where each vector component <sub>i</sub> is independent of the other vector components <sub>j</sub> (j ≠ i) and wherein the vector components are sorted according to an estimated signal to noise

ratio" as recited in claim 8, nor "wherein the statistical property includes a covariance matrix derived from estimated properties X of the object and a corresponding statistical distribution F determined during the measuring of the property set Y" as recited in claim 10. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

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